

WHAT IS CLAIMED IS:

1. An information reproducing apparatus comprising:

5 a reproducing section operable to reproduce multiplexed data in which first information which is and a plurality of channels of second information which is compressed and encrypted are multiplexed, the second information being reproduced in synchronization with the first information;

10 a decryption section operable to decrypt the reproduced data from the reproducing section;

a first decoder operable to decompress the decrypted data from the decryption section;

15 an analyzer operable to analyze the decrypted data from the decryption section to detect the first information;

20 a conversion section operable to alter at least a part of the first information contained in the decrypted data from the decryption section based on an analysis result by the analyzer; and

second to n-th (n is a natural number, $n > 1$) decoders operable to receive the altered data from the conversion section and decompress the respective channels of second information.

25 2. The information reproducing apparatus according

to claim 1, further comprising

a first switch operable to switch a data path such that the reproduced data from the reproducing section bypasses the decryption section and is input to the first decoder when a predetermined control signal is input, otherwise, the reproduced data from the reproducing section is input to the decryption section, and

a second switch operable to switch a data path such that the reproduced data from the reproducing section is input to each of second to n-th decoders when the control signal is input, otherwise, the data from the conversion section is input to each of second to n-th decoders.

3. The information reproducing apparatus according to claims 2, wherein the decryption section, analyzer, conversion section, first switch and second switch are integrated so as not to be isolated.

4. The information reproducing apparatus according to claim 1, wherein the conversion section does not alter time information necessary for synchronized reproduction of the first and second information.

5. The information reproducing apparatus according to claim 1, wherein the conversion section changes a data region to be altered based on predetermined data length information in a multiplexed unit.

6. The information reproducing apparatus according to claim 1, wherein the conversion section replaces data to be altered with data uncorrelated to the data to be altered.

7. The information reproducing apparatus according to claim 1, wherein the multiplexed data is a data stream.

8. The information reproducing apparatus according to claim 2, wherein the multiplexed data is a data stream.

9. The information reproducing apparatus according to claim 3, wherein the multiplexed data is a data stream.

10. The information reproducing apparatus according to claim 4, wherein the multiplexed data is a data stream.

11. The information reproducing apparatus according to claim 5, wherein the multiplexed data is a data stream.

12. The information reproducing apparatus according to claim 6, wherein the multiplexed data is a data stream.

13. The information reproducing apparatus according to claim 1, wherein either one of the first and second information is video information and the other is audio information.

14. The information reproducing apparatus according to claim 2, wherein either one of the first and second information is video information and the other is audio information.

15. The information reproducing apparatus according to claim 3, wherein either one of the first and second

information is video information and the other is audio information.

16. The information reproducing apparatus according to claim 4, wherein either one of the first and second
5 information is video information and the other is audio information.

17. The information reproducing apparatus according to claim 5, wherein either one of the first and second information is video information and the other is audio
10 information.

18. The information reproducing apparatus according to claim 6, wherein either one of the first and second information is video information and the other is audio information.

15 19. An information reproducing apparatus comprising:
a reproducing section operable to reproduce a multiplexed stream in which compressed and encrypted video information and a plurality of channels of compressed and encrypted audio information are multiplexed;

20 a decryption section operable to decrypt the multiplexed stream reproduced by the reproducing section;

a first decoder operable to decompress the video information and one channel of audio information contained in the multiplexed stream decrypted by the decryption
25 section;

a management information embedding section operable to embed video management information into the video data decompressed by the first decoder;

5 a video output section operable to generate a reproduction video signal from the video data embedded with the video management information by the management information embedding section;

10 a first audio output section operable to generate a reproduction audio signal from the audio data decompressed by the first decoder;

a stream analyzer operable to analyze the multiplexed stream decrypted by the decryption section to detect the video information;

15 a stream conversion section operable to alter at least a part of the video information contained in the multiplexed stream decrypted by the decryption section based on an analysis result from the stream analyzer;

20 second to n-th (n is a natural number, $n > 1$) decoders operable to receive the altered multiplexed stream from the conversion section and decompress the respective channels of audio information; and

second to n-th audio output sections operable to generate reproduction audio signals from audio data decompressed by the corresponding audio decoders.

25 20. The information reproducing apparatus according

to claim 19, further comprising

a first switch operable to switch a data path such that the reproduced data from the reproducing section bypasses the decryption section and is input to the first decoder when a predetermined control signal is input, otherwise, the reproduced data from the reproducing section is input to the decryption section, and

a second switch operable to switch a data path such that the reproduced data from the reproducing section is input to each of second to n-th decoders when the control signal is input, otherwise, the data from the stream conversion section is input to each of second to n-th decoders.

21. The information reproducing apparatus according to claim 20, wherein the decryption section, analyzer, stream conversion section, first switch and second switch are integrated so as not to be isolated.

22. The information reproducing apparatus according to claim 19, wherein the stream conversion section does not alter time information necessary for synchronized reproduction of video and audio information.

23. The information reproducing apparatus according to claims 19, wherein the stream conversion section changes a data region to be altered based on predetermined data length information in a multiplexed unit.

24. The information reproducing apparatus according to claims 19, wherein the stream conversion section replaces data to be altered with data uncorrelated to the data to be altered.